



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,978	05/16/2007	Jorgen Poulsen	378/9-2280	8802

28147 7590 01/06/2010
WILLIAM J. SAPONE
COLEMAN SUDOL SAPONE P.C.
714 COLORADO AVENUE
BRIDGE PORT, CT 06605

EXAMINER

ORLANDO, AMBER ROSE

ART UNIT	PAPER NUMBER
----------	--------------

1797

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

01/06/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

wsapone@cssiplaw.com
wjspatent@aol.com
wsapone@colemansudolsapone.com

Office Action Summary	Application No.	Applicant(s)	
	10/597,978	POULSEN, JORGEN	
	Examiner	Art Unit	
	AMBER ORLANDO	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to the correspondence filed 09/21/2009.

Claims 1, 2 and 5 have been amended.

Claims 1-5 and 7 have been rejected.

Claims 1-5 and 7 have been examined and are pending.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 3, 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poulsen DK 174840 in view of Kahler US 5,868,889.

4. For claim 1, the Poulsen reference discloses a method of manufacturing a filter element for use in connection with gas turbines, the method comprising centrally arranging a hollow tubular inner insert inside of a hollow tubular outer insert (page 8 paragraph 3 and figure 1 objects 2 and 3), securing a top flange at one end of said

Art Unit: 1797

inserts (page 10 paragraph 2), and stiffening said inserts to form said tubular filter element by providing a stiffening net, the net provided by applying a hardenable liquid mass to the outer and/or inner side of the tubular inserts by discharging the liquid, and hardening the liquid mass to stiffen inserts for forming the filter element (page 8 paragraph 3). The reference does not disclose discharging the liquid from one or more nozzles, while moving the nozzles relative to the tubular inserts.

5. The Kahler reference discloses discharging a liquid from one or more nozzles, while moving the nozzles relative to the filter (figure 2 objects 6a' and 6b'). The reference does not disclose the filter being tubular inserts. It would have been obvious to one having ordinary skill in the art to have the material being a tubular filter element since it is well known to a skilled artisan that moving the nozzles over ANY material would produce patterns. Merely changing the shape of the filter element does not provide patentability.

6. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Poulsen reference to include discharging the liquid from one or more nozzles, while moving the nozzles relative to the tubular inserts (Kahler, figure 1b objects 6a' and 6b') because this allows the user to control the amount of liquid being used, as well as control the spacing of the liquid lines.

7. For claim 3, the Poulsen reference discloses the rings formed from the liquid mass extend helically, one or more rings formed along the outer and/or inner surface of the filter element (figure 1 object 6).

Art Unit: 1797

8. For claim 4, the Poulsen reference discloses the liquid mass in rings along the outer and/or inner surface of the filter element (page 8 paragraph 3, figure 1 object 6). The reference does not disclose the said rings being arranged in planes essentially parallel with the end faces of the filter element, the reference does disclose the hot melt line "can take another form" (page 9 paragraph 1). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference to include said rings being arranged in planes essentially parallel with the end faces of the filter element because it would produce the same result. The reference does not disclose using one or more nozzles to apply the liquid mass.

9. The Kahler reference discloses using one or more nozzles to apply a liquid mass (figure 2 objects 6a' and 6b').

10. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Poulsen reference to include using one or more nozzles to apply the liquid mass (Kahler, figure 2 objects 6a' and 6b') because this allows the user to control the amount of liquid being used, as well as control the spacing of the liquid lines.

11. For claim 7, the Poulsen reference discloses the filter element is made of combustible materials (page 6 paragraph 4).

12. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poulsen DK 174840 and Kahler US 5,868,889 as applied in claim 1 above and further in view of Lippold US 5,066,319 and Spencer US 5,753,071.

Art Unit: 1797

13. For claim 2, the Poulsen reference discloses applying the liquid mass so as to form one or more rings, which surround the tubular inserts (page 8 paragraph 3, figure 1 object 6). Although the reference does not disclose applying and forming connecting lines between the rings, the reference does disclose the hot melt line "can take another form" (page 9 paragraph 1). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference to include the connecting lines, since it was known in the art that any shape of hot melt lines would produce the same result. The reference does not disclose one or more nozzles being stationary in the longitudinal direction relative to the tubular filter element, while rotating the tubular filter element a number of rotations about a longitudinal axis thereof, and oscillating one or more nozzles with an oscillation greater than or equal to the distance between two rings and smaller than or equal to the length of the filter element and the rings and connecting lines forming a net.

14. The Spencer reference discloses one or more nozzles being stationary in the longitudinal direction relative to the tubular filter element, while rotating the tubular filter element a number of rotations about a longitudinal axis thereof (column 6, lines 10-51).

15. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Poulsen reference to include one or more nozzles being stationary in the longitudinal direction relative to the tubular filter element, while rotating the tubular filter element a number of rotations about a longitudinal axis thereof (Spencer, column 6, lines 10-51) because this allows the user to control the amount of liquid being used, as well as control the spacing of the liquid lines.

Art Unit: 1797

16. The Kahler reference discloses oscillating one or more nozzles (figure 2 objects 6a' and 6b'). Although the reference does not explicitly disclose the oscillations being greater than or equal to the distance between two rings and smaller than or equal to the length of the filter element, it is obvious from figure 1b objects 6a' and 6b' that the oscillation degree can be smaller or greater depending on the users preference and have the ability to perform the above requirements.

17. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Poulsen reference to include during the application of the liquid mass, that one or more nozzles are stationary in the longitudinal direction, while the filter element rotates a number of rotations about its longitudinal axis, on which one or more nozzles rotates or oscillates with an oscillation greater than or equal to the distance between two rings and smaller than or equal to the length of the filter element (Kahler figure 1b objects 6a' and 6b') because this allows the user to control the amount of liquid being used, as well as control the spacing of the liquid lines.

18. The Lippold reference discloses the filter element and the adhesive connecting lines forming a net (column 7, lines 56-65). The reference does not explicitly state the adhesive forming rings. It would have been obvious to one having ordinary skill in the art a the time the invention was made to have modified the reference to include the adhesive forming rings since it was known in the art that any shape of adhesive lines would produce the same result

19. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Poulsen reference to include the rings and

Art Unit: 1797

connecting lines forming a net (Lippold column 7, lines 56-65) because this makes the filter easy to handle and highly stable.

20. For claim 3, the Poulsen reference discloses the rings formed from the liquid mass extend helically, one or more rings formed along the outer and/or inner surface of the filter element (figure 1 object 6).

21. For claim 4, the Poulsen reference discloses the liquid mass in rings along the outer and/or inner surface of the filter element (page 8 paragraph 3, figure 1 object 6). The reference does not disclose the said rings being arranged in planes essentially parallel with the end faces of the filter element, the reference does disclose the hot melt line "can take another form" (page 9 paragraph 1). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the reference to include said rings being arranged in planes essentially parallel with the end faces of the filter element because it would produce the same result. The reference does not disclose using one or more nozzles to apply the liquid mass.

22. The Kahler reference discloses using one or more nozzles to apply the liquid mass (figure 2 objects 6a' and 6b').

23. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Poulsen reference to include using one or more nozzles to apply the liquid mass (Kahler, figure 2 objects 6a' and 6b') because this allows the user to control the amount of liquid being used, as well as control the spacing of the liquid lines.

Art Unit: 1797

24. Claim 5/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poulsen DK 174840 and Kahler US 5,868,889 as applied in claim 1 above, and further in view of Spencer US 5,753,071 and Adams et al. US 2002/0168469

25. For claim 5/1, the Poulsen and Kahler references disclose the filter element according to claim 1 as shown above. The Poulsen reference discloses applying the liquid mass in rings (page 8 paragraph 3, figure 1 object 6). The reference does not disclose using one or more nozzles to apply the liquid mass, rotating the tubular filter element about its longitudinal axis thereof and moving the tubular filter element to and fro in a longitudinal direction with an oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the filter element for applying connecting lines between the rings.

26. The Spencer reference discloses using one or more nozzles to first apply the liquid mass, rotating the tubular filter element in a longitudinal axis thereof (column 6, lines 10-51).

27. It would have been obvious to one having ordinary skill to have modified the Poulsen reference to include using one or more nozzles to first apply the liquid mass, and rotating the tubular filter element in a longitudinal axis thereof (Spencer column 6, lines 10-51) because this allows the user to control the amount of liquid being used, as well as control the spacing of the liquid lines.

28. The Adams et al. reference discloses moving the material beneath the nozzles to apply adhesive in a desired pattern (paragraph [0015]). The reference does not explicitly state the material moving to and fro in the longitudinal direction with an

Art Unit: 1797

oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the material for applying connecting lines between the rings. The reference discloses moving the material to produce any desired pattern. It would have been obvious to one having ordinary skill in the art to have the material (any material including a tubular filter element) moving to and fro in the longitudinal direction with an oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the material for applying connecting lines between the rings since it is well known in the art to move the material in any manner in order to create a specific design. The reference does not explicitly state the material being a tubular filter element. It would have been obvious to one having ordinary skill in the art to have the material being a filter element since it is well known to a skilled artisan that moving ANY material beneath adhesive nozzles would produce patterns.

29. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Poulsen reference to include moving the tubular filter element to and fro in a longitudinal direction with an oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the tubular filter element for applying connecting lines between the rings (Adams et al.) because this creates an adhesive net (Lippold column 7, lines 56-65) that makes the filter easy to handle and highly stable.

30. Claim 5/2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poulsen DK 174840, Kahler US 5,868,889, Lippold US 5,066,319 and Spencer US 5,753,071 as applied in claim 2 above, and further in view of Adams et al. US 2002/0168469

Art Unit: 1797

31. For claim 5/2, the Poulsen DK 174840, Kahler US 5,868,889, Lippold US 5,066,319 and Spencer US 5,753,071 references disclose the filter element according to claim 2 as shown above. The Poulsen reference discloses applying the liquid mass in rings (page 8 paragraph 3, figure 1 object 6). The reference does not disclose using one or more nozzles to apply the liquid mass, rotating the tubular filter element about its longitudinal axis thereof and moving the tubular filter element to and fro in a longitudinal direction with an oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the filter element for applying connecting lines between the rings.

32. The Spencer reference discloses using one or more nozzles to first apply the liquid mass, rotating the tubular filter element in a longitudinal axis thereof (column 6, lines 10-51).

33. It would have been obvious to one having ordinary skill to have modified the Poulsen reference to include using one or more nozzles to first apply the liquid mass, and rotating the tubular filter element in a longitudinal axis thereof (Spencer column 6, lines 10-51) because this allows the user to control the amount of liquid being used, as well as control the spacing of the liquid lines.

34. The Adams et al. reference discloses moving the material beneath the nozzles to apply adhesive in a desired pattern (paragraph [0015]). The reference does not explicitly state the material moving to and fro in the longitudinal direction with an oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the material for applying connecting lines between the rings. The

Art Unit: 1797

reference discloses moving the material to produce any desired pattern. It would have been obvious to one having ordinary skill in the art to have the material moving to and fro in the longitudinal direction with an oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the material for applying connecting lines between the rings since it is well known in the art to move the material in any manner in order to create a specific design. The reference does not explicitly state the material being a tubular filter element. It would have been obvious to one having ordinary skill in the art to have the material being a tubular filter element since it is well known to a skilled artisan that moving ANY material beneath adhesive nozzles would produce patterns.

35. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Poulsen reference to include moving the tubular filter element to and fro in a longitudinal direction with an oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the tubular filter element for applying connecting lines between the rings (Adams et al.) because this creates an adhesive net (Lippold column 7, lines 56-65) that makes the filter easy to handle and highly stable.

Response to Arguments

1. Applicant's arguments filed 09/21/2009 have been fully considered but they are not persuasive.

Art Unit: 1797

2. For claims 1, 3, 4 and 7, the applicant argues that the Kahler reference does not disclose nozzles which are movable relative to an assembly of tubular inserts.

Furthermore the applicant contends that the applied glue cannot form a stiffening net.

3. The examiner disagrees. The Kahler reference is used to show that the liquid mass can be applied to a filter element of any kind. It would have been obvious to one having ordinary skill in the art to have the material being a tubular filter element since it is well known to a skilled artisan that moving the nozzles over ANY material (including a tubular insert) would produce patterns. Merely changing the shape of the filter element does not provide patentability. The Kahler reference also shows that any liquid (including a stiffening net) can be applied to a material (column 3, lines 4-19). It would be obvious to one having ordinary skill in the art at the time the invention was made that the Poulsen reference needs a pattern of liquid applied to the outside of its tubular inserts (page 9 paragraph 1). The Kahler reference also shows that any liquid (including a stiffening net) can be applied to a material (column 3, lines 4-19). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Poulsen reference to include any liquid (stiffening net) being applied to a material (Kahler column 3, lines 4-19) in order to obtain a desired amount of liquid on the material, as well as the desired shape (Kahler column 3, lines 4-19 and column 4, lines 60-64).

4. The applicant contends that "there is nothing which would lead one to avoid entirely the flat sheet as well as the pre-manufactured net, and to instead, form a net in

Art Unit: 1797

place from a hardenable liquid material, as is done according to the applicants' invention".

5. The examiner disagrees. First, the Kahler reference is used to show that the liquid mass can be applied to a filter element of any kind. It would have been obvious to one having ordinary skill in the art to have the material being a tubular filter element since it is well known to a skilled artisan that moving the nozzles over ANY material (including a tubular insert) would produce patterns. Second it would be obvious to one having ordinary skill in the art at the time the invention was made to have used the nozzles applying a liquid mass to the filter element (of the Kahler reference) in order to reduce the number of steps in which to take in order to get to the desired apparatus of the Poulsen reference (e.g. combining the steps of fabricating the net and applying it to the filter element into one step) as would be within the knowledge of a skilled artisan, and also to obtain a desired amount of liquid on the material, as well as the desired shape (Kahler column 3, lines 4-19 and column 4, lines 60-64).

6. For claims 2-4, the applicant contends that the hot melt line "does not suggest the use of a hardenable liquid which forms itself a specific supporting structure, a stiffening net. Generally, adhesives do not provide an independent support structure, only "adhesion"."

7. The examiner disagrees. The Poulsen reference specifically states "a spiral-shaped hot melt line 6, whereby the hot-melt line 6 in this context as well, functions as a stiffening means, and can take another form, for example a line that is circular in parts". Therefore showing that the hot-melt line can be a stiffening net.

Art Unit: 1797

8. The applicant contends that the Spencer reference does not disclose multiple rotations being completely, and therefore no net would be formed following Spencer.

36. The examiner agrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The Spencer reference is only used to show one or more nozzles to first apply the liquid mass, rotating the tubular filter element in a longitudinal axis thereof (column 6, lines 10-51). The Spencer reference discloses that the intermediate assembly is rotated about its central axis in order to apply the liquid mass. It would be obvious having ordinary skill in the art at the time the invention was made to rotate the intermediate assembly as many times as necessary, in order to apply the correct amount of adhesive.

37. The applicant contends that "Kahler applies an adhesive to a sheet which is mated with a folded material, and so no notches are provided. Kahler in essence is directed to creating what would be considered the "intermediate assembly" combining a first medium 34 with a second medium 36 whereas Spencer is directed to bonding end flanges to the intermediate assembly by providing a notch between the two and filling the notch with adhesive. Oscillations would not be appropriate for filling such notches, and as the two steps of the filter manufacture are distinct, one skilled in the art would not be lead to the result proposed according to the examiner. Nor is there even anything to propose moreover the provision of a stiffening net placed over for example, the

Art Unit: 1797

intermediate assembly. Consequently, the combination would not predictably lead one to the applicant's invention. "

38. The examiner disagrees. The applicant is stating that the entire reference of the Kahler and Spencer are being combined with one another. This is not true. The examiner is combining merely the rotating mechanism of the Spencer reference and the movable nozzles of the Kahler reference (as described in the rejection above), and the ability of the rotating mechanism, and the movable nozzles to dispense a liquid mass. The Poulsen reference is used to show the liquid mass being a stiffening net.

39. The applicant argues "Lippold is also readily distinguishable. In Lippold, as with the other cited patents, an adhesive is used to join two parts together, that is, to bond the offsets to each other. (See Fig. 5) As is described, the contact region of the offsets 30 is rectangular in Fig. 1a, and "The application of adhesive makes just these areas more rigid..." (col. 4, 1.57-68). See also col. 6, 1. 15-17 "The self-hardening layer of adhesive coating 38 is applied to the offsets 30 and their side faces 300 by these rolls." As to the "net-like or spun" reference, this was only disclosed relative to "the adhesive material... placed on the offsets 30" as a way to avoid "total closure of the surface area of the filter material 10..." so that the filter characteristics "are only slightly impaired..." (col. 7, 1.57-63) Consequently, the addition of Lippold does not render claims 1 or 2 obvious, as no stiffening net is created. Lippold relies on the formed offsets to stiffen the filter, with these bonded together by adhesive, possibly discontinuous rather than in a layer."

Art Unit: 1797

40. The examiner disagrees. The Lippold reference discloses that the adhesive material makes the filter material more rigid in certain areas, therefore showing that it is providing a stiffening net. Therefore when the adhesive material is placed on the filter in a net-like or spun pattern, it will provide a stiffening function to the filter material where the filter material comes in contact with the filter. Nowhere within the applicant's invention does the applicant state that the stiffening net should provide a stiffening function to the entirety of the filter, therefore the applicant's arguments are moot.

41. The applicant contends that the Adams reference does not disclose the detailed patterned characteristics as required by claim 5/1. A pattern is not what is claimed but a stiffening net which must meet the structural requirements for stiffening a filter. The fact that any pattern could be generated, for gluing two items together does not lead one to producing the particular net of the applicants invention, nor certainly would it lead one to believe that the combination would lead predictably to a filter stiffened by a formed in place stiffening net. None of the references give any assurance that such a net could be formed. Consequently, claim 5/1 is believed to be patentable.

42. The examiner disagrees. The Adams et al. reference discloses moving the material beneath the nozzles to apply adhesive in a desired pattern (paragraph [0015]). The reference does not explicitly state the material moving to and fro in the longitudinal direction with an oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the material for applying connecting lines between the rings. The reference discloses moving the material to produce any desired pattern. It would have been obvious to one having ordinary skill in the art to have the material

Art Unit: 1797

moving to and fro in the longitudinal direction with an oscillation greater than or equal to a distance between two rings and smaller than or equal to a length of the material for applying connecting lines between the rings since it is well known in the art to move the material in any manner in order to create a specific design.

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **AMBER ORLANDO** whose telephone number is (571)270-3149. The examiner can normally be reached on Mon.-Thurs. (6:30-5:00).

Art Unit: 1797

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AO

/Walter D. Griffin/
Supervisory Patent Examiner, Art Unit 1797